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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,554

06/30/2004

Toru Inaoka

47201

5239

1609

7590

11/23/2007

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

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SUITE 600

WASHINGTON,, DC 20036

EXAMINER

ZUCKER, PAUL A

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

11/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/500,554	INAKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul A. Zucker	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Current Status*

1. This action is responsive to Applicants' amendment of 28 June 2002 in Paper No 10.
2. Receipt and entry of Applicants' amendment is acknowledged.
3. Applicant's cancellation of claims 2, 5 and 8 is acknowledged.
4. Applicant's addition of new claim 10 is acknowledged.
5. Claims 1, 3, 4, 6, 7, 9 and 10 are pending.
6. The rejections under 35 USC § 112, second paragraph, set forth in paragraph 3 of the previous Office Action mailed 6 June 2007 is withdrawn in view of Applicants' amendment.
7. The rejection under 35 USC § 102 set forth in paragraph 4 of the previous Office Action mailed 6 June 2007 is withdrawn in favor of the new rejection below. Applicants' remarks with regard to this rejection are therefore rendered moot.

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### *New Rejections*

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### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Vanover et al (WO 92/00365-A1 01-1992). Vanover discloses (Page 11, line 25-page 12, line

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27) the sequential addition of portions (3.44 equivalents, then 8.92 equivalents for a total of 12.36 equivalents) of ethylene oxide to trifluoroethanol. Vanover is silent with regard to the water content of the starting alcohol. The Examiner therefore presumes a water content of 0 ppm. Vanover therefore anticipates claims 1 and 3.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1, 3, 4, 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanover et al (WO 92/00365-A1 01-1992) when considered with Hirata et al (EP 0799807-A2 04-1997).

Instantly claimed are processes for producing low-molar addition polyalkylene glycols, (meth)acrylate esters derived therefrom, copolymers derived from the (meth)acrylate esters and cement compositions of the methacrylate esters.

Vanover teaches (Page 11, line 25-page 12, line 27) the sequential addition of portions (3.44 equivalents, then 8.92 equivalents for a total of 12.36 equivalents) of ethylene oxide to trifluoroethanol. Vanover is silent with regard to the water content of the starting alcohol. The Examiner therefore presumes a water content of 0 ppm.

Vanover is silent with regard to the use of his low-molar addition alkoxyalkylene glycols in the formation of (meth)acrylate esters and, necessarily, further uses of those esters as well.

Hirata, however, teaches (Abstract) a method for the dispersion of cement, which comprises incorporating in a cement composition consisting at least of cement and water a cement dispersing agent formed of a polymer obtained by polymerizing a monomer component containing an alkoxypolyalkyleneglycol mono(meth)acrylic ester monomer produced by the interesterification of an alkoxypolyalkylene glycol and a (meth)acrylic ester. Hirata, however, teaches (Page 8, lines 6-19) the esterification of low-molar addition alkoxypolyalkylene glycol to give the corresponding methacrylate. Hirata teaches (Page 10, lines 1-14) a cement dispersant from the methacrylate by copolymerization with methacrylic acid.

One of ordinary skill in the art would therefore have been motivated to use the method of Vanover to produce the alkoxypolyalkylene glycol required for the methods of Hirata. There would have been a reasonable expectation for success

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since the products of Vanover meet the specifications for the alkoxypolyalkylene glycol required for the methods of Hirata.

Thus the instantly claimed methods would have been obvious to one of ordinary skill in the art.

### ***Conclusion***


10. Claims 1, 3, 4, 6, 7, 9 and 10 are pending. Claims 1, 3, 4, 6, 7, 9 and 10 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Zucker whose telephone number is 571-272-0650. The examiner can normally be reached on Monday-Friday 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Evonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Paul A. Zucker  
Primary Examiner  
Art Unit 1621